

Sustainable Development Impact Assessment Checklist

Project Name/ Policy Name & No: HVO as a drop in replacement for DERV

Contact Person: Milly Osborne

Date completed: 30/05/2023

Please send through the completed checklist with a copy of the project PID or the draft policy to environment@london-fire.gov.uk. For existing policies undergoing minor amendments, please send through a marked up copy of the policy, with the original SDIA.

Other impact assessments completed				Yes	No
1. Has an Equalities Impact Assessment been completed?				☒	☐
2. Has a Health, Safety and Wellbeing assessment been completed?				☒	☐
Environmental Impacts					
3. Will this consume any of the following (please tick those that apply and state how and if this would increase or decrease our consumption):					
Gas	☐	Electricity	☐	Water	☐
Petrol or diesel	☐	Hazardous chemicals	☐	Other natural resources e.g. timber	☒
Comments: HVO is a paraffinic, synthetic diesel and is a drop-in replacement for conventional mineral diesel. Unlike first generation biodiesel, hydrogen is used as a catalyst in the creation process instead of methanol. This makes it more clean burning than other renewable diesel alternatives. HVO is created by collecting vegetable fats and oils and putting them through a hydrogenation and isomerisation process which removes impurities. The process breaks down existing molecules and builds them up again, leaving a final product with consistent carbon chains but without the impurities that are common in mineral diesel and biodiesel. Hydrogenation removes all the oxygen from the oils, meaning it has a much longer shelf life than regular diesel. HVO fuel produces 90% less carbon dioxide (CO2) emission compared to mineral diesel.					
4. Will this produce or reduce our production of (please tick those that apply and describe what and how):					
Non-hazardous waste	☐	Hazardous waste (see PN 862)	☐	pollutants to air, land or water?	☒
Comments: HVO reduces well to wheel carbon emissions. Overall carbon emissions will be reduced by 90% compared to carbon emissions from mineral diesel, therefore reducing the negative impact the Brigade has on the environment.					
5. Will this impact (positively or negatively):				Yes	No

a. Operational/business travel by staff	☐	☒
b. Travel/deliveries by our suppliers	☐	☒
c. Environmental protection at incidents	☐	☒
d. a Site of Special Scientific Interest	☐	☒
e. Gardens or other wildlife at stations/brigade sites (e.g. nesting birds or bats)	☐	☒
Comments: Click here to enter text.		
Procurement	Yes	No
6. Will this result in the purchase of goods, services or works or influence how they are procured?	☒	☐
f. Is this for a purchase of greater than £1m?	☐	☒
g. Will this use/result in a tender for manufactured goods such as electronics, textiles, and building materials?	☐	☒
h. Will this service require low skilled/low paid employees?	☐	☒
i. Will the goods consume utilities or consumables?	☐	☒
j. Does this involve major works taking place?	☐	☒
k. If so are BREEAM and Ecological surveys required?	☐	☐
l. Will this support future cost avoidance?	☐	☒
m. Could all or part of the purchase be provided by small or local businesses?	☒	☐
n. Could this be delivered by a voluntary/community sector organisation?	☐	☒
o. Has a Request For Tender been submitted to Procurement through hotwire?	☒	☐
Comments: HVO could be procured from a SME, however they would need to be on the CCS framework, as this is the framework used to procure bulk fuel. HVO can be produced from sustainable renewable waste feedstocks such as waste cooking oil and residues. Reuse of used cooking oil promotes sustainable resource management, rather than disposing of cooking oil waste in landfill or as hazardous waste. However, question marks remain over the guarantees of ecological sustainability of HVO sources, and the availability of a sustainable HVO supply in the long-term. The choice of oil for HVO is typically Palm Oil. Palm Oil plantations are associated with deforestation and are extremely detrimental to the environment. Procurement can however be specified for supplies without any Palm Oil. As a result, manufacturers are ramping up their non-palm oil sources. This gives confidence in the security of supply of HVO without Palm Oil content going forward. Procurement of HVO will only be supported if it is accepted by the Renewable Transport Fuel Obligation (RFTO). The Brigade should only procure HVO if it comes from truly sustainable sources.		

For the SD Team to complete:

Policy sustainability risk rating: High

Inputs/outputs/ impacts to address in Full SDIA: Approved by Daniel Bellucci.

Date completed: 31/05/2023